

## REMARKS

The Examiner has rejected Claims 1, 2, 4-7, 8-13, 17-18, 20-24, 25-29, 33-35, 38-40, 42 and 44 under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (U.S. Patent No. 5,960,170), in view of Futral (U.S. Patent No. 6,615,282), and in further view of Peikari (U.S. Publication No. 2002/0166085). Additionally, the Examiner has rejected Claims 3, 19, 36, 41 and 43 under 35 U.S.C. 103(a) as being unpatentable over Chen et al., in view of Zuta (WO 98/45778). Applicant respectfully disagrees with such rejections, especially in view of the amendments made hereinabove to the independent claims.

With respect to independent Claims 1, 3, 17, 19, 33, 41 and 43, the Examiner has relied on Col. 17, lines 29-40 from Chen to make a prior art showing of applicant's claimed "indicating the data to a scanning co-processor coupled to the central processing unit so that the data is scanned by the scanning co-processor under the control of the scanning control logic" (see this or similar, but not necessarily identical language in the foregoing independent claims).

Applicant respectfully asserts that the excerpt from Chen relied on by the Examiner simply discloses that "[t]he client executes 535 the virus detection object in order to gather the relevant information...[and] transmits 540 the results for receipt by the virus detection server 400" (Col. 17, lines 29-33 – emphasis added). Additionally, applicant notes that the excerpt relied on by the Examiner merely relates to a "virus detection object to ascertain the scope of the virus scan" where the "virus detection object procures information including the devices, memories, directories, and files that require scanning" (Col. 17, lines 18-19 and 26-28 – emphasis added).

First, applicant respectfully asserts that only generally teaching a client which executes a virus detection object, as in Chen, fails to even suggest "a scanning co-processor coupled to the central processing unit," let alone specifically, "indicating the data to a scanning co-processor coupled to the central processing unit so that the data is

scanned by the scanning co-processor under the control of the scanning control logic,” as claimed. In fact, after reviewing the entirety of the Examiner’s rejection for the aforementioned independent claims, it appears that the Examiner has relied on the same general description of a client (specifically Col. 8, lines 43-54 and Col. 16, lines 6-65) to meet applicant’s claimed “central processing unit.” Clearly, simply disclosing a client, as in Chen, fails to specifically teach “indicating the data to a scanning co-processor coupled to the central processing unit so that the data is scanned by the scanning co-processor under the control of the scanning control logic” (emphasis added), especially where the “scanning control logic [is executed] utilizing [the] central processing unit,” in the context claimed (see the aforementioned independent claims for context).

Second, applicant respectfully asserts that the excerpt from Chen relied on by the Examiner only relates to executing the virus detection object in order to gather relevant information, where the virus detection object is used to ascertain the scope of the virus scan and the gathered relevant information includes the devices, memories, directories, and files that require scanning. Clearly, executing a virus detection object to ascertain the scope of the virus scan where information regarding devices, memories, directories, and files that require scanning is gathered, as in Chen, fails to even suggest “indicating the data to a scanning co-processor coupled to the central processing unit so that the data is scanned by the scanning co-processor under the control of the scanning control logic” (emphasis added), as claimed.

Additionally, with respect to the independent claims, the Examiner has relied on Col. 20, lines 25-37 from Chen to make a prior art showing of applicant’s claimed “executing additional logic utilizing the central processing unit while waiting for the results from the scanning co-processor” (see this or similar, but not necessarily identical language in the independent claims).

Applicant respectfully asserts that the excerpt from Chen relied on by the Examiner merely discloses that “once the virus detection object is produced 565, it is transmitted 570 to the client 300 for execution 575,” and that “[t]he results of the

execution are transmitted 580 to the virus detection server 400 so that the results can be analyzed 585” where “[t]he analysis 585 includes an initial determination of whether additional virus detection objects are required for scanning, and, where no additional virus detection objects are required, a determination of whether a virus was detected” (emphasis added).

However, only teaching that a virus detection object is transmitted to a client for execution and that results of the execution are transmitted to a virus detection server for analysis, as in Chen, fails to even suggest “executing additional logic utilizing the central processing unit while waiting for the results from the scanning co-processor” (emphasis added), as claimed.

Further, with respect to the independent claims, the Examiner has relied on Col. 16, line 29-Col. 17, line 40 from Chen to make a prior art showing of applicant’s claimed technique “wherein the scanning co-processor is under the control of the central processing unit via the execution of the scanning control logic by the central processing unit” (see this or similar, but not necessarily identical language in the independent claims).

Applicant respectfully asserts that the excerpt from Chen relied on by the Examiner teaches that “[t]he agent program, upon a detection or determination that the triggering event has occurred, issues a request for a virus scan to the virus detection server 400” (Col. 16, lines 40-42 – emphasis added), that “[a] virus detection object to ascertain the scope of the virus scan is produced 525 by the virus detection server 400 and is then transmitted 530 to the client 300 using conventional network communication protocols” (Col. 17, lines 18-21 – emphasis added), and that “[t]he client executes 535 the virus detection object in order to gather the relevant information...[and] transmits 540 the results for receipt by the virus detection server 400” (Col. 17, lines 29-33 – emphasis added).

Thus, Chen merely teaches that an agent program issues a request for a virus scan to a virus detection server, that a virus detection object used to ascertain the scope of the virus scan is produced by the virus detection server and transmitted to the client using network communication protocols, and that the client executes the virus detection object and transmits the results to the virus detection server, which does not even suggest that “the scanning co-processor is under the control of the central processing unit via the execution of the scanning control logic by the central processing unit” (emphasis added), as claimed.

With respect to independent Claims 1, 3, 17, 19, 33, 41 and 43, the Examiner has relied on Col. 16, lines 29-39 from Chen to make a prior art showing of applicant’s claimed technique “wherein the data is sent to the scanning co-processor if it is determined that the data meets the predetermined criteria” (see this or similar, but not necessarily identical language in the foregoing independent claims).

Applicant respectfully asserts that the excerpt from Chen relied on by the Examiner simply relates to a triggering event, and specifically discloses that “[a]n exemplary triggering event is the lapsing of a predetermined amount of time since the most recent virus scan...[or] those likely to facilitate the spread of viruses” (Col. 16, lines 29-32). After reviewing the context of such disclosure in Chen, applicant respectfully points out that the triggering event in Chen is simply used such that “[t]he agent program, upon a detection or determination that the triggering event has occurred, issues a request for a virus scan to the virus detection server 400” (Col. 16, lines 40-42 - emphasis added).

However, merely mentioning examples of a triggering event, upon the detection of which a request for a virus scan is issued, as in Chen, fails to even suggest that “the data is sent to the scanning co-processor if it is determined that the data meets the predetermined criteria,” especially where “the data is scanned by the scanning co-processor” (emphasis added), in the context claimed (see foregoing independent claims for context).

Still yet, with respect to the independent claims, the Examiner has relied on Col. 20, lines 25-60 from Chen to make a prior art showing of applicant's claimed technique "wherein additional data to be scanned by the scanning co-processor is queued while waiting for the results from the scanning co-processor" (see this or similar, but not necessarily identical language in the independent claims).

Applicant respectfully asserts that the excerpt from Chen relied on by the Examiner simply teaches that "once the virus detection object is produced 565, it is transmitted 570 to the client 300 for execution 575," where "[t]he results of the execution are transmitted 580 to the virus detection server 400 so that the results can be analyzed 585" (Col. 20, lines 25-27), and that "[i]f, as a result of the virus scanning stage, it is determined 590 that a virus was detected at the client 300, then the remedial stage commences" (Col. 20, lines 38-40 – emphasis added).

However, teaching that a virus detection object is transmitted to the client for execution, where results of the execution are transmitted to the virus detection server for analysis, such that if it is determined that a virus was detected, a remedial stage commences, as in Chen, does not even suggest any sort of queue, let alone specifically teach that "additional data to be scanned by the scanning co-processor is queued while waiting for the results from the scanning co-processor" (emphasis added), as claimed.

With respect to independent Claims 34-36, it appears that the Examiner has failed to specifically address applicant's claimed "indicating a location of the data to a scanning co-processor coupled to the central processing unit if it is determined that the data meets the predetermined criteria" (see this or similar, but not necessarily identical language in the foregoing independent claims).

Nevertheless, applicant respectfully asserts that Chen teaches that "[t]he agent program, upon a detection or determination that the triggering event has occurred, issues a request for a virus scan to the virus detection server 400" (Col. 16, lines 40-42)" and that "[i]f, as a result of the virus scanning stage, it is determined 590 that a virus was

detected at the client 300, then the remedial stage commences” (Col. 20, lines 38-40). However, disclosing that a request for a virus scan is issued upon detection of a triggering event and that a remedial stage commences if a virus is detected, as in Chen, fails to meet applicant’s claimed “indicating a location of the data to a scanning co-processor coupled to the central processing unit if it is determined that the data meets the predetermined criteria” (emphasis added), as claimed.

Furthermore, with respect to independent Claims 34-36, the Examiner has relied on Col. 20, lines 25-60 from Chen to make a prior art showing of applicant’s claimed “processing the data utilizing the central processing unit upon the receipt of favorable results from the scanning co-processor including a situation where malicious code is not detected” (see this or similar, but not necessarily identical language in the foregoing independent claims).

Applicant respectfully asserts that the excerpt from Chen relied on by the Examiner merely teaches that “once the virus detection object is produced 565, it is transmitted 570 to the client 300 for execution 575,” where “[t]he results of the execution are transmitted 580 to the virus detection server 400 so that the results can be analyzed 585” (Col. 20, lines 25-29), and that “[i]f, as a result of the virus scanning stage, it is determined 590 that a virus was detected at the client 300, then the remedial stage commences” (Col. 20, lines 38-40).

Clearly, disclosing that a virus detection object is transmitted to a client for execution where results of the execution are transmitted to a virus detection server for analysis, and that a remedial stage commences if a virus is detected, as in Chen, fails to even suggest a situation where “favorable results from the scanning co-processor including a situation where malicious code is not detected [are received]” (emphasis added), as claimed, and thus cannot meet applicant’s claimed “processing the data utilizing the central processing unit upon the receipt of favorable results from the scanning co-processor including a situation where malicious code is not detected,” as claimed.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir.1991).

Applicant respectfully asserts that at least the third element of the *prima facie* case of obviousness has not been met, since the prior art excerpts, as relied upon by the Examiner, fail to teach or suggest all of the claim limitations, as noted above. Nevertheless, despite such paramount deficiencies and in the spirit of expediting the prosecution of the present application, applicant has amended the independent claims to further distinguish applicant's claim language from the prior art references relied on by the Examiner, as follows:

“scanning the data with the scanning co-processor under the control of the scanning control logic for offloading scanning operations from the central processing unit” (see this or similar, but not necessarily identical language in the independent claims).

Applicant respectfully asserts that Chen merely teaches “that “[t]he client executes 535 the virus detection object in order to gather the relevant information...[and] transmits 540 the results for receipt by the virus detection server 400” (Col. 17, lines 29-33 – emphasis added). However, only generally teaching a client which executes a virus detection object, as in Chen, fails to even suggest “scanning the data with the scanning co-processor under the control of the scanning control logic for offloading scanning operations from the central processing unit” (emphasis added), as presently claimed.

Since at least the third element of the *prima facie* case of obviousness has not been met, a notice of allowance or specific prior art showing of each of the foregoing claim elements, in combination with the remaining claimed features, is respectfully requested.

To this end, all of the independent claims are deemed allowable. Moreover, the remaining dependent claims are further deemed allowable, in view of their dependence on such independent claims.

In the event a telephone conversation would expedite the prosecution of this application, the Examiner may reach the undersigned at (408) 505-5100. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 50-1351 (Order No. NA11P014).

Respectfully submitted,  
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